

In the Claims:

The pending claims are presented below.

1. (previously presented) A method for analyzing a suspected defect in an integrated circuit die, the method comprising:
 - removing substrate from a selected portion of the die to expose the suspected defect;
 - recording a plurality of images of the selected portion as substrate is being removed therefrom; and
 - creating a three-dimensional image of the selected portion of the die with the plurality of images and analyzing the die therefrom.
2. (original) The method of claim 1, wherein removing substrate includes cross-sectioning the die.
3. (original) The method of claim 1, wherein removing substrate includes using a FIB.
4. (original) The method of claim 1, wherein recording a plurality of images includes using a SEM.
5. (original) The method of claim 1, wherein removing substrate includes using a FIB produced by a dual FIB/e-beam device, and wherein recording a plurality of images includes using the e-beam of the dual FIB/e-beam device to create a SEM image.
6. (original) The method of claim 5, further comprising programming a controller adapted to control the dual FIB/e-beam device to effect the recording of a sufficient amount of SEM images to create a three-dimensional image of the selected portion.
7. (original) The method of claim 1, wherein removing substrate from the selected portion includes exposing a defect in the die, and wherein creating a three-dimensional image includes creating a three-dimensional image of the defect.

8. (original) The method of claim 1, wherein creating a three-dimensional image includes combining the plurality of images of the selected portion and creating a combined image therefrom.

9. (original) The method of claim 1, further comprising using the three-dimensional image to detect a defect in the die.

10. (original) The method of claim 9, wherein creating a three-dimensional image includes creating an image of the defect, further comprising using the image of the detected defect to analyze the defect.

11. (original) The method of claim 1, wherein creating a three dimensional image includes using selected ones of the plurality of images of the selected portion to create a three dimensional image of less than the entire selected portion.

12. (original) The method of claim 1, further comprising editing the three dimensional image to create an edited image of only a portion of the three-dimensional image.

13. (original) The method of claim 12, wherein editing the three-dimensional image includes creating an image of a cross-section of the selected portion.

14. (previously presented) A system for analyzing a suspected defect in an integrated circuit die, the system comprising:

means for removing substrate from a selected portion of the die to expose the suspected defect;

means for recording a plurality of images of the selected portion while substrate is being removed therefrom; and

means for creating a three-dimensional image of the selected portion of the die with the plurality of images.

15. (previously presented) A system for analyzing a suspected defect in an integrated circuit die, the system comprising:

 a substrate removal arrangement adapted to remove substrate from a selected portion of the die to expose the suspected defect;

 an image recording arrangement adapted to record a plurality of images of the selected portion while substrate is being removed therefrom; and

 an image creation arrangement adapted to create a three-dimensional image of the selected portion of the die with a plurality of images recorded by the imaging arrangement.

16. (original) The system of claim 15, wherein the substrate removal arrangement includes a FIB device

17. (original) The system of claim 15, wherein the image recording arrangement includes an e-beam device adapted to create a SEM image.

18. (original) The system of claim 15, wherein the substrate removal arrangement and the image recording arrangement are included in a single dual FIB/e-beam device adapted to remove substrate with the FIB and to create a SEM image with the e-beam.

19. (original) The system of claim 18, wherein the image creation arrangement is adapted to use the SEM image to create the three-dimensional image.

20. (original) The system of claim 15, wherein the image creation arrangement includes a computer adapted to create the three-dimensional image in response to image characteristic selections.